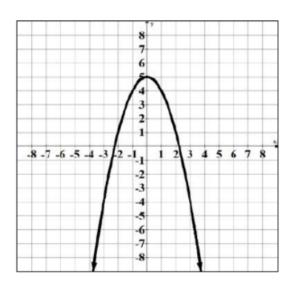
## Algebra 2 - Functions Problem Set

## Stasya

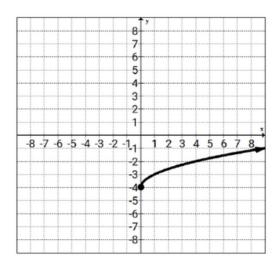
1.



Write the domain, range, and end behavior of this graph.

- 2. Find the inverse of the function  $f(x) = 2(x-5)^2$ . If necessary, state the domain restriction.
- 3. For the function  $f(x) = (x+3)^2 4$ , write the parent function, its transformations, and the domain and range of this function.

4.



f(x) is shown. Draw  $f^{-1}x$ .

- 5. Write the inequality  $x \in \mathbb{R}$  in set notation and interval notation.
- 6. For the function  $f(x) = -(x-6)^3 + 1$ , write the parent function, its transformations, and the domain and range of this function.